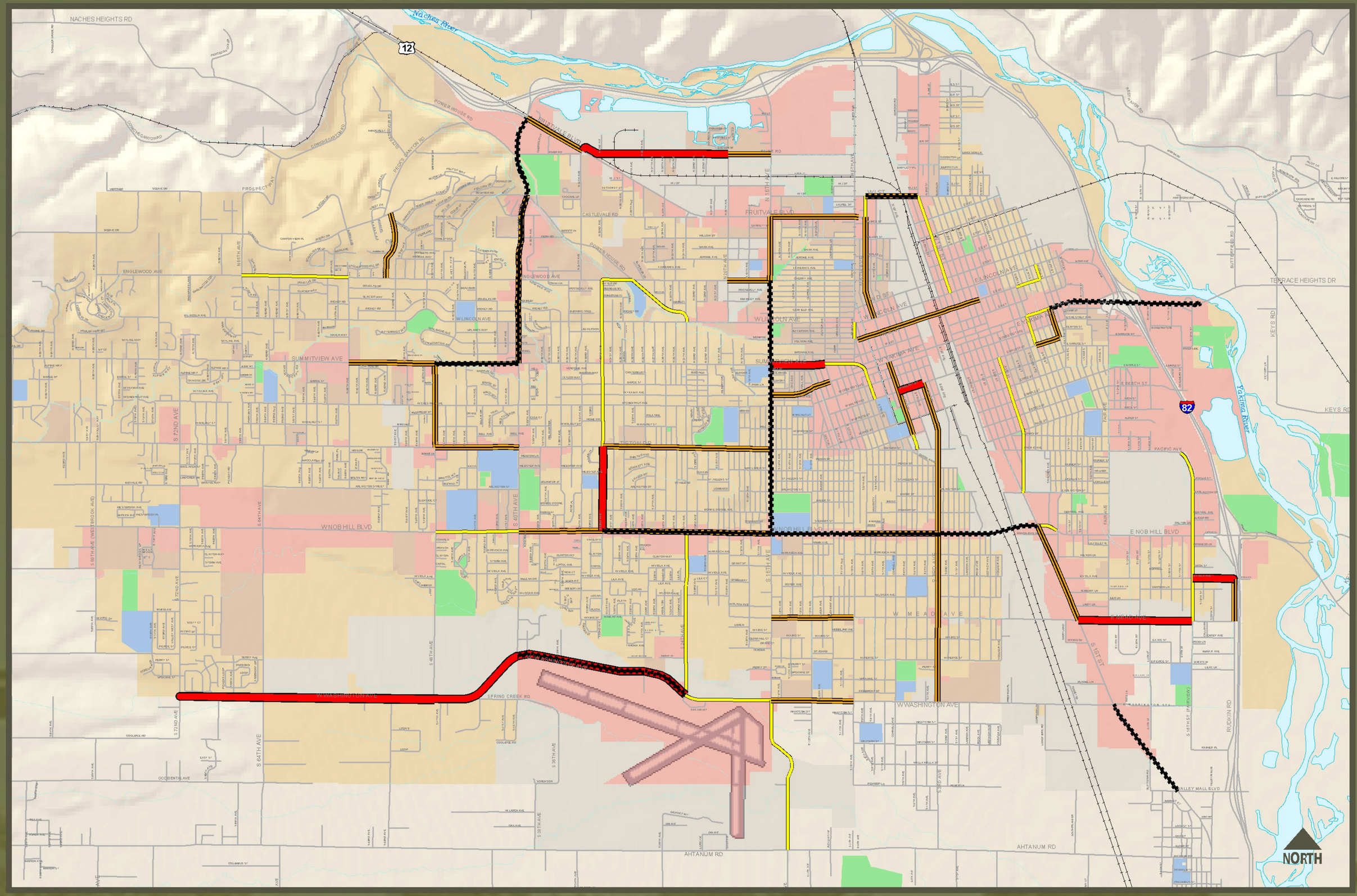
PRIORITY STREET PROJECTS

Future Capacity and Severe Pavement Conditions



MAP OVERVIEW

This map identifies Arterial Streets that require future improvement projects, based upon two separate conditions: future capacity constraints or severe pavement deficiencies. Projects identified on this map, as well as others submitted by the public particpation process require financial analysis as well as need assessment.

The City of Yakima, Washington is currently updating the Transportation Plan, as required by the Washington State Growth Management Act. The ability of public streets to support future traffic is a basic guideline of the Growth Management Process called "Concurrency". In short, street capacity must be concurrent with development. To plan for future capacity needs, each city establishes and adopts the local standards for concurrency.

The structural integrity of our public streets is measured by the surface conditions. In 2002, 85 linear miles of City Arterial Streets were inventoried for pavement conditions. Street segments where the pavement is currently in poor or failing conditions require significant public investment to rebuild the road base or conduct a grind and overlay of the pavement surface.

CAPACITY CONSTRAINTS

The primary component of street capacity is the local definition of Level of Service. Capacity is defined as a ratio of traffic volumes to maximum lane capacity (V/C). The City of Yakima adopted a standard which sets the maximum lane capacity to 800 vehicles during peak hour. A two-lane street, for example, would have a maximum capacity during peak hour of 1600 vehicles.

Traffic volumes have averaged a 1.5% annual growth rate over recent years. This trend may be expected to continue into the 20-year future.

At the current time no street segments within the City of Yakima exceed the threshold for Transportation Concurrency and the related Level of Service (LOS) standard. However, projected traffic growth rates will likely create areas (approximately 10.5 linear miles) where traffic congestion will exceed or approach the adopted LOS standard by the year 2023.

Future Capacity Constrained Arterial Streets

Street Segments	# Lanes	2003 ADT	2003 V/C	2003 LOS	2023 ADT	2023 V/C	2023 LOS No Improv	Length (ft)
40th Ave: Englewood Ave to Summitview Ave	4	26,300	0.74	C	34,710	0.94	E	2,630
Yakima Ave: I-82 NBD On-Ramp to 17th St	5	28,200	0.73	C	36,660	0.89	D	1,724
40th Ave: River Rd to Englewood	4	24,400	0.69	B	31,720	0.86	D	4,035
Yakima Ave: 8th St to I-82 SBD Off-Ramp	5	26,200	0.67	B	34,060	0.82	D	3,056
16th Ave: Fruitvale Blvd to Summitview Ave	4	22,600	0.67	B	29,380	0.80	D	3,051
16th Ave: Summitview to Nob Hill Blvd	4	22,400	0.62	B	29,120	0.79	C	4,906
Nob Hill Blvd: 18th St to East CL	4	22,300	0.65	B	28,990	0.79	C	5,867
Nob Hill Blvd: 3rd Ave to 32nd Ave	5	25,000	0.68	B	32,500	0.79	C	7,885
Washington Ave: 1st St to East CL	2	11,000	0.74	C	14,300	0.78	C	400
Yakima Ave: 17th St to East CL	5	24,000	0.59	A	31,200	0.75	C	800
Washington Ave: 40th Ave to 24th Ave	2	10,500	0.65	C	13,650	0.74	C	5,188
Summitview Ave: 48th Ave to 40th Ave	4	20,900	0.67	A	27,170	0.74	C	2,630
40th Ave: Fruitvale Blvd to River Rd	4	20,400	0.58	B	26,520	0.72	C	1,205
1st St: Washington Ave to Valley Mall Blvd	5	22,850	0.62	B	29,705	0.72	C	3,394
I St: 5th Ave to 1st St	2	9,980	0.57	A	12,974	0.71	C	1,654
40th Ave: Summitview Ave to Tieton Dr	4	19,930	0.55	A	25,909	0.70	C	2,633
Nob Hill Blvd: 72nd Ave - 64th Ave	2	9,880	0.54	A	12,844	0.70	C	4,489
Total								55,547

PAVEMENT CONDITIONS

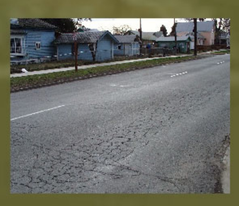
A Pavement Condition Index (PCI) is a standardized process of collecting data and rating pavement segments of Arterial Streets. The Index is relative to the surface condition, including the nature and extent of the pavement distress. The PCI is the basic management tool to prioritize safety, repair and improvement projects related to the structural integrity of the street condition.

In 2002, 85 linear miles were inventoried for surface conditions and the PCI calculated. The City of Yakima, Washington uses computerized software entitled Pavement Management Systems, produced by the Metropolitan Transportation Commission of Oakland, California.

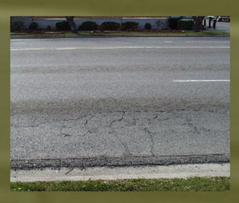
PCI Rating		Treatment
80 - 100	Good Condition.	No surface repairs
60 - 79	Fair Condition.	Crack fill, chipseal, light repairs.
41 - 59	Poor Condition.	Chipseal, overlay
1 - 40	Failed Condition.	Rehabilitation.

The 2002 PCI identified a total of 20.8 miles of Arterial Streets which had either a "Poor" rating of between 41 to 60 PCI, or a "Failed" rating of a PCI 40 or less. These street segments representing 24.4% of the total Arterial Streets in Yakima require either major repair or total rehabilitation.

Failed Condition *- Rating 1 - 40 Deficiences cannot be corrected by maintenance treatments. Failed pavement characterized by high rutting, alligator cracking, flushing, transverse cracking.*



Poor Condition *- Rating 41 - 60 Streets have multiple distresses, distributed throughout segment. Pavement cracks medium to high. Rough pavment patches, wheel rutting.*



Fair Condition *- Rating 61 - 70 Distresses noted on these streets were generally localized and do not pose safety risk or require immediate action.*

Severe Pavement Conditions by Location (PCI 1- 60)

Street Segment	2002 PCI (avg)	Length (ft)
16th Ave: Fruitvale Blvd - Englewood Ave	56	2,008
1st St: Nob Hill Blvd - Mead Ave	43	3,241
32nd Ave: Tieton Dr - Nob Hill Blvd	26	2,657
3rd Ave: Walnut St - Mead Ave	45	10,095
40th Ave: Powerhouse Rd - Summitview Ave	50	5,291
48th Ave: Summitview Ave - Tieton Dr	48	2,633
53rd Ave: Scenic Dr - Englewood Ave	55	2,148
5th Ave: Fruitvale Blvd - Tieton Dr	51	5,636
8th St: Yakima Ave - Walnut St	50	968
B St: 5th Ave - 3rd St	53	4,029
Englewood Ave: 16th Ave - 20th Ave	59	1,339
Fruitvale Blvd: 5th Ave - 16th Ave	58	4,802
I St: 5th Ave - 1st St	54	1,654
Mead Ave: 10th Ave - 16th Ave; 1st St - 18th St	35	6,158
Nob Hill Blvd: 10th Ave - 40th Ave	51	10,566
River Rd: 16th Ave - Fruitvale Blvd	26	6,026
Rudkin Rd: Mead Ave - Viola Ave	48	1,343
Summitview Ave: 48th Ave - 56th Ave; 16th Ave - Custer Ave	44	4,400
Tieton Dr: 16th Ave - 32nd Ave; 40th Ave - 48th Ave	48	7,905
Viola Ave: 18th St - Rudkin Rd	31	1,294
Walnut St: 3rd Ave - 5th Ave; 6th St - 8th St	42	1,570
Washington Ave: 10th Ave - 16th Ave; 24th Ave - 48th Ave	38	22,104
Yakima Ave: Custer Ave - 16th Ave	45	1,943
Total (Feet)		109,810
Total (Miles)		20.80

MAP LEGEND

Future Capacity Constrained Streets

2023 Volume/Capacity >0.70

2002 Pavement Conditions Index (PCI)

Failed Condition PCI 1 - 40

Poor Condition PCI 41 - 60

Fair Condition PCI 61 - 70

General Future Land Use

Low Density Residential

High Density Residential

Retail/Commercial

Industrial

Parks

Schools

0 0.25 0.5 1 Miles

SUMMARY OF NEEDS

The identified street segments on this map are critical improvement projects for the City of Yakima. The public participation process will help to prioritize these projects and may identify other areas of citizen concerns. Each project must also be analyzed for economic and possible environmental impacts.

Future capacity constrained streets may require additional travel lanes, or other measures to reduce congestion. In some cases, improving alternative routes may relieve the congestion on certain street segments. Streets where the structural surface has failed or near the failure point require significant public investment. In some cases the street segments can be rehabilitated. Others need a complete rebuild of the road base and surface.

YAKIMA URBAN AREA - TRANSPORTATION PLAN UPDATE

City of Yakima, Washington, Public Works Department, 2301 Fruitvale Blvd, Yakima, WA 98902, http://www.ci.yakima.wa.us/services/streets